ABSTRACT

After a resist mask 14 with a predetermined thickness profile is overlaid on a piezoelectric substrate 11, the substrate 11 is shaped to an objective three-dimensional configuration by dry etching process using an etching gas with a differential etching rate between the piezoelectric substrate 11 and the mask 14. The thickness profile may be given to the mask 14 by reflow of masking material or by compression with a precision stamp. The substrate 11 can be shaped to a three-dimensional configuration corresponding to an amplified thickness profile of the mask 14 by compositional control of a reactive gas during dry etching. Since the piezoelectric material is accurately shaped to an objective form without defects, high-quality elements and devices are provided.